

QGIS Application - Feature request #11008

Field Calculator - get centroid of polygon easily

2014-08-05 03:21 AM - Jonathan Moules

Status: Closed	
Priority: Normal	
Assignee:	
Category:	
Pull Request or Patch supplied:	Resolution:
Easy fix?: No	Copied to github as #: 19350
Description	
Currently it's difficult (non-obvious) how to get the centroid of a polygon using the field calculator:	
<pre>xmin(centroid(\$geometry)) ymin(centroid(\$geometry))</pre>	
As a user I'd expect it to simply be:	
<pre>\$x \$y</pre>	
If it's a polygon, assuming there are no parameters it seems reasonable to me that \$x/\$y would result in the respective coordinates of the centroid.	

Associated revisions

Revision 55027e54 - 2015-09-18 01:09 AM - Nyal Dawson

Clean up and extend expression geometry functions:

- New expression functions for area(geom), perimeter(geom), point_n(geom), start_point(geom), end_point(geom), make_point(x,y)
- Add new variant to length() function which takes a geometry object, allows for length(geom) evaluation.
- Rename x_at, y_at to \$x_at, \$y_at (alias old names) to reflect that these only work on current feature geometry
- Add x(geom), y(geom) functions which return x and y coordinate for point geometries or centroid x/y for non-point geometries (fix #11008)

History

#1 - 2014-08-05 03:35 AM - Andreas Neumann

You probably meant:

```
x(centroid($geometry))  
y(centroid($geometry))
```

\$x/\$y would not work on a polygon, which is the input geometry.

#2 - 2014-08-05 03:49 AM - Jonathan Moules

I get what you're saying but the version you put (using "x" rather than "xmin") is no more obvious than the version that is currently in use because you still have the whole "centroid(geometry)" part.

\$x and \$y are obvious to end users (well as obvious as it can get given the nature of these things). The rest of the stuff should be done automagically behind the scenes.

I appreciate they don't currently work with the polygon geometry, the notion behind the ticket is that I believe they should work.

Hope that's clearer.

#3 - 2014-08-05 06:22 PM - Antonio Locandro

First of all the current behaviour is a very bad choice, it should have been `x(centroid($geometry)),y(centroid($geometry))` from the start anyway. I also think `$geometry` could have been replaced by `$geom` which is shorter if you have to type a lot

Having said that you could assume `$x` and `$y` for a polygon to return the centroid for it

Another option is to have something like

`$centroid.x >` will return longitude

`$centroid.y >` will return latitude

`$centroid >` will return an x,y tuple

As you see I am omitting writing `$geometry` since it should be implied, like when you calculate `$area` or `$perimeter`

It is a design choice but I think it would be nicer if one could omit writing `$geometry` when possible

#4 - 2015-09-17 04:09 PM - Nyal Dawson

- Status changed from Open to Closed

Fixed in changeset commit:"55027e545f6265aaeda47dc48923cd5be6a47d74".